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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,351	01/17/2002	Markus Henneken	ZAHFRI P400US	2560
20210	7590	05/04/2004	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET MANCHESTER, NH 03101-1151			JACKSON, ANDRE K	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/031,351

Applicant(s)

HENNEKEN, MARKUS

Examiner

André K. Jackson

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because torque-transmitting hub should be replaced with torque measuring hub in Figure 2. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The amendment filed 01/26/04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material, which is not supported by the original disclosure, is as follows: single shift test step and individually shifting the elements.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in

the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 15-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicant has provided the limitations of a single shift test step and individually shifting the elements. There is no description or explanation of how this test is employed with the instant application. The terms are not found in the originally filed specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 22-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 22, Applicant states that McKenzie et al. does not disclose the use of an additional or **separate** stationary torque-measuring hub located between the transmission output shaft and a fixed part of the test bench. Applicant has not disclosed this limitation in the disclosure. Where is it disclosed that a **separate** torque-measuring hub is needed in the invention? How is this **separate** torque-measuring hub located

between the transmission output shaft and a fixed part of the test bench when there is no bench present in the invention? It is clear from the figure and the specification that there is a stationary torque-measuring hub; however, claim calls for a **separate** torque-measuring hub. Where is the located in the specification?

Clarification and correction is needed.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 15,19-22,26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Gierer.

Regarding claim 15, Gierer discloses in the patent entitled "Method of determining parameters of an automatic transmission" which simulates a vehicle operation on a test bench by connecting an input shaft of the transmission that is connected with a driving source (1,2 Figure 1); which produces preset rotational speeds and testing a plurality of shifting elements in the transmission (Abstract) and connecting the output shaft of the transmission with a stationary torque-measuring hub (Figure 1, 6);

blocking the output shaft (7) and providing an input rotational speed to the transmission to supply pressure-setting elements in the transmission with hydraulic pressure sufficient to actuate the shifting elements out of an opened condition to the extent necessary to determine, indicate and store a desired shifting element characteristic (Columns 1-2, Figure 1,8).

Regarding claims 19 and 26, Gierer discloses the step of using the torque transmitted to the hub as the characteristic quantity (Column 2).

Regarding claim 21, Gierer discloses the step of maintaining the shifting elements in a closed position after testing (Column 2).

Regarding claims 20 and 27, Gierer discloses the step of using the time needed to shift a shifting element with positive engagement as the characteristic quantity (Columns 1,2).

Regarding claim 22, Gierer simulates a vehicle operation by connecting an input shaft (2, Figure 1) of the transmission that is connected with a driving source (1), which produces preset rotational speeds and testing a plurality of shifting elements in the transmission by providing an input rotational speed to the transmission to supply pressure-setting elements in the transmission with hydraulic pressure sufficient to actuate the shifting elements out of an opened condition to the extent necessary to determine, indicate and store a desired shifting element characteristic (Abstract, Column 1) and an output shaft of the transmission being connected with a stationary torque-measuring hub mounted to a

fixed part of the bench (Figure 1, 6) and blocking the output shaft (7) and disclosing the step of maintaining the shifting elements in a closed position after testing (Column 2).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 16-18 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gierer in view of McKenzie et al.

Regarding claims 16 and 23, Gierer do not explicitly disclose where the shifting element slip tends towards zero. However, McKenzie et al. disclose where the shifting element slip tends towards zero (Column 7, lines 1-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gierer to include this limitation. By adding this feature the apparatus would be able to completely evaluate the system.

Regarding claim 17 and 24, Gierer do not explicitly disclose the step of using the hysteresis of the threshold between opening and closing of the shifting element as characteristic quantity. However, McKenzie et

al. disclose the step of using the hysteresis of the threshold between opening and closing of the shifting element as characteristic quantity (Column 5, lines 46-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gierer to include this limitation. By adding this feature the apparatus would be able to determine the pressure difference in the system between the shifting elements.

Regarding claims 18 and 25, Gierer do not explicitly disclose the step of using the slip rotational speed of the shifting element as the characteristic quantity. However, McKenzie et al. disclose the step of using the slip rotational speed of the shifting element as the characteristic quantity (Column 4, lines 9-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gierer to include this limitation. By adding this feature apparatus would be able to determine the speed of the individual clutches or gears.

Response to Arguments

11. Applicant's arguments with respect to claims 15-27 have been considered but are moot in view of the new ground of rejection.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE**

FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

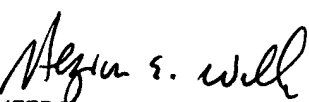
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.J. 

April 30, 2004


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800